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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,704	07/31/2001	Kaare Tais Christensen	1076.40413X00	9898

20457 7590 12/17/2002

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EXAMINER

NGUYEN, LINH V

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 12/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/917,704

Applicant(s)

CHRISTENSEN, KAARE TAIS

Examiner

Linh V. Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/17/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## **DETAILED ACTION**

### ***Drawings***

Figures 1, and 2, should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Response to Amendment***

1. This office action is in response to applicant's amendment received on 10/29/02. Claims 2 – 9, 11 – 14, 16, 20, and 21 have been amended. Claims 1 – 21, are pending on this application.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 3, 5, 6, 7, 8, 10, 11, and 15 – 21, are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. U.S. patent No. 5,281,931.

Regarding to claims 1, 2, 3, 5, 6, 7, and 8, Fig. 3 Bailey et al. disclose a method and apparatus for a tuning filter (20), the filter being associated with a center frequency

(Col. 2 line 16), comprising the steps of: configuring the filter as an oscillator (Col. 2 lines 20 – 24)); tuning the oscillator to a desired frequency (Col. 2 lines 46 – 55); and reconfiguring the oscillator to operate as the filter with the desired frequency as the center frequency (Col. 5 lines 51 - 56) wherein:

- step of configuring the filter as an oscillator comprises compensating for losses in the filter (Col. 3 lines 55 - 57).

- wherein the filter comprises a band pass filter (Col. 1 line 51)

- step of tuning the oscillator comprises providing a tuning signal (out put signal of 22), and further comprising a step of recording the tuning signal by storing the signal in a register which causes the oscillator to operate at the desired frequency (Col. 5 lines 25 – 44).

4. Regarding to claims 10, 11, 15 - 21, Bailey et al. as applied to claims 1, 2, 3, 5, 6, 7, and 8, above disclose every aspect of applicant's claimed invention.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al.

Bailey et al. as applied to claim 1 above, disclose every aspect of applicant claimed invention. However Bailey et al. do not disclose expressly the filter 20 of Fig. 3 comprises a notch filter.

At the time the invention was made, it would have been to a person of ordinary skill in the art to modify to the bandpass filter of Bailey et al. with the notch filter because the notch filter or bandpass filter is a conventional and well-known art. Applicant has not disclosed that notch filter provides an advantage over bandpass filter, and is used for a particular purpose, or solves a state problem. One ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with bandpass filter of Bailey et al. as had indicated in applicant specification and claimed invention 3, also the main objection of the present invention is the method for tuning the filter instead of what type of filter.

Therefore, it would have been obvious to one of ordinary skill in the art to utilizing the notch filter, instead of bandpass filter of Bailey et al. to obtain specific designed choice of filter.

7. Claims 9, 12, 13, and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al., and further in view of Kobayashi U.S. patent No. 5,550,520.

8. Bailey. et al. as applied to claim 1, 10, above disclose every aspect of applicant's claim invention, however Bailey et al. does not explicitly disclose wherein the band pass filter includes a tank circuit and the step of tuning the oscillator comprises a

Art Unit: 2819

varactor for tuning the resonant frequency of the tank and provide a negative resistance of compensate for parasitic resistance

Fig. 3 Kobayashi disclose a tunable bandpass filter by oscillation includes a tank circuit and the step of tuning the oscillator comprises a varactor for tuning the resonant frequency of the tank and provide a negative resistance of compensate for parasitic resistance (Fig. 1, and Fig. 2)

Bailey et al. and Kobayashi are analogous, because they are from similar problem solving of tunable filter, therefore it would be obvious to one having ordinary skill in the art at the time the invention was made to apply bandpass filter of Kobayashi to the basspand filter of Bailey et al. for the purpose of providing, compensate for resistive losses teaches by Kobayashi (Col. 1 lines 61 – 65)

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 10, 15, 17, and 18 have been considered but are moot in view of the new ground(s) of rejection. Specifically Bailey et al. is now used to reject the claims as noted supra. Fig. 3 Bailey et al. disclose an apparatus and method for configuring the filter (20) as an oscillator by selecting reference signal source with MUX (12) in calibration or tuning mode, and reconfigure as a filter in operation mode by selecting information signal source and deselecting reference signal source.

**Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (703) 305-1934. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Tokar can be reached at (703) 305-3493. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

LVN

December 8, 2002

  
Michael Tokar  
Supervisory Patent Examiner  
Technology Center 2800